

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

Claim 1 (currently amended): A green-compact electrode for electrical discharge surface treatment of a work comprising: ~~a mixed material a compression molded mixture~~ of a metal powder and a working liquid having a carbon component.

Claim 2 (previously presented): A green-compact electrode for electrical discharge surface treatment according to claim 1, wherein the working liquid constitutes 5 wt % to 10 wt % of the green compact electrode.

Claim 3 (previously presented): A method of manufacturing a green-compact electrode for electrical discharge surface treatment comprising: the step of compression-molding a mixed material of a metal powder and a working liquid having a carbon component.

Claim 4 (previously presented): A method of manufacturing a green-compact electrode for electrical discharge surface treatment according to claim 3, wherein a mixture ratio of the working liquid constitutes 5 wt % to 10 wt % of the green compact electrode.

Claim 5 (currently amended): A method of performing electrical discharge

surface treatment comprising:

positioning a green-compact electrode comprised of a mixed compression molded material of a metal powder and a working liquid having a carbon component opposite a work in a second working liquid, which is the same as the working liquid within the green-compact electrode; and

forming a hard coating film on the work by causing electrical discharge between the green compact electrode and the work.

Claim 6 (currently amended): An apparatus for performing electrical discharge surface treatment comprising: a green-compact electrode comprised of a compression molded mixture of metal powder and a working liquid having a carbon component; a work; a working tank for receiving said work; and means for causing an electrical discharge between said green compact electrode and said work.

Claim 7 (previously presented): A method of recycling a green-compact electrode for electrical discharge surface treatment comprising:

- a) compression molding a mixed material of a metal powder and a working liquid having a carbon component to form the green-compact electrode;
- b) positioning the green-compact electrode opposite a work;
- c) performing discharge surface treatment by causing electrical discharge between the green-compact electrode and the work to form a hard coating on the work;
- d) pulverizing portions of the green-compact electrode which are left after said discharge surface treating has been completed into powder, and

e) compression molding the powder obtained from the pulverizing step to obtain a new green-compact electrode.

Claim 8 (previously presented): A method of recycling electrodes used in electrical discharge surface treatment, comprising:

collecting used electrodes which are primarily composed of compressed powders;

pulverizing said used electrodes into a powder; and
compression molding said powder to form new electrodes.

Claim 9 (currently added): The method of recycling electrodes according to claim 8, wherein the compressed powders comprise metal powder and working fluid.

Claim 10 (currently added): The method of recycling electrodes according to claim 9, further comprising adjusting the mixture ratio of the metal powder and the working fluid.